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EXAMINER				
HOOK, JAMES F				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/535,600  
Filing Date: October 03, 2005  
Appellant(s): HOUSTON ET AL.

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Kenneth Ottesen  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed July 23, 2009 appealing from the Office action mailed July 24, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

EP 1,254,645 Tayside November 6, 2002, European Patent Application.  
DE 597,472 Kuhlmann January 18, 1936

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 16-27 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Tayside (EP 1,254,645) in view of Kuhlman (DE 597,472). The reference to Tayside discloses the recited insert formed as an insert where at least two helical extending formations 12 extend in from an insert 11, and such is used as an insert into a blood vessel such as grafts and stents, or used in other fields for other fluids, such can be biodegradable, can be formed either as a separate insert or as ribs formed in the wall of the tube, such is used for blood flow and the spiral ribs impart a spiral flow, and where the dimensions can be varied to meet the needs of the user. The reference to Tayside discloses all of the recited structure with the exception of the specific percentage extension of the rib into the flow path including 50%. The reference to Kuhlmann discloses the recited helical formation "a" defining a helix where such extends into the interior of the pipe "b" by at least 50%. It would have been obvious to one skilled in the art to modify the ribs in Tayside to be of any size as set forth in Tayside, where the teachings of Kuhlmann discloses that it is old and known to form such ribs of 50% extension into the conduit to control flow as such is a known percentage extension of an equivalent structure in an equivalent use, where one skilled in the art would only require routine skill in the art to arrive at optimum values as suggested by Tayside and taught by Kuhlmann and would expect such to function.

**(10) Response to Argument**

With respect to the arguments, predominantly all of the arguments presented are not supported by any legitimate evidence where such are statements pulled directly from an Affidavit that was untimely filed with the Appeal Brief and is not being considered since such was not filed before the filing of an Appeal Brief as required by MPEP 1206.

In general, with respect to the arguments, the reference to Tayside is not contested by appellant for teaching a spiral member extending within the internal wall of a blood flow tubing to impart a spiral flow within. Likewise appellant has not contested and actually confirms the teachings of Kuhlmann of teaching a spiral member extending within the internal wall of a pipe for imparting spiral flow where such imparts flow in liquids without specifying what types of liquids. Any argument with respect to age of the modifying reference is not persuasive where the teachings of Kuhlmann were known at the time of invention of Tayside, and therefore the technology of Kuhlmann existed at the time Tayside was invented, and since Kuhlmann only recites liquids, it is considered to include a liquids and in no way should exclude any liquids. There is no proof that the statements made herein are factual, and the reference to Kuhlmann does not limit itself for use with only specific types of fluids over other fluids, therefore this argument is not persuasive when not supported by factual evidence that such is true.

With respect to argument 2, there is no evidence provided that would suggest the reference to Kuhlmann in any way teaches any specific fluid therefore any argument that such is dealing with a specific type of liquid different from that of Tayside is not

persuasive and not supported by Kuhlmann. Due to the fact that the affidavit is not being considered as timely, there is no support for these statements and such are merely argument with no support. As set forth in Kuhlmann first translated paragraph, the invention thereof covers forming vortex flow in gaseous, liquid, or powdery media without being specific as to what liquids are included or excluded, therefore all liquids are considered to be applicable. Also, as set forth in Kuhlmann third translated paragraph, third sentence "the chosen depth  $h$  of the spiral can be greater in relation to the pipe diameter and to the lead of the spiral where the flow speed is slower" sets forth that it was known by Kuhlmann that the depth of the spiral  $h$  with respect to the diameter can be larger when speed of flow is slower, thereby setting forth that slower flow speeds are capable of use with the invention of Kuhlmann, therefore there is acknowledgement in Kuhlmann that the depth  $h$  of the spiral can be made larger in slower flows thereby giving one skilled in the art to have an expectation of success when using the teachings of Kuhlmann on other spirals provided in flow to impart a vortex or spiral flow therein, and would have predictable results. There is no proof that the statements made herein are factual, and the reference to Kuhlmann does not limit itself for use with only specific types of fluids over other fluids, therefore this argument is not persuasive when not supported by factual evidence that such is true.

With respect to argument 3, such sets forth only opinion as provided within the affidavit which is not being considered. Without any support for these arguments which are based upon fact, such is not considered a pertinent argument. There is no suggestion in the prior art to Tayside or Kuhlmann which suggests the combination

would result in any of the effects recited in argument 3, and as set forth above Kuhlmann teaches the use of larger fins in slower flow fluids, and does not set forth any restrictions based upon what the liquid flowing within the tube is, and likewise there is no recitation in Kuhlmann that such is a rigid pipe as argued by appellant, therefore there is no support for this argument. It should also be noted that Kuhlmann in no way excludes use with biological fluids, and for example in subparagraph b) the word "may" suggests that these arguments are not actual known factual occurrences, and with no further support for this argument other than the affidavit which is not considered, this argument is not persuasive. There is no proof that the statements made herein are factual, and the reference to Kuhlmann does not limit itself for use with only specific types of fluids over other fluids, therefore this argument is not persuasive when not supported by factual evidence that such is true.

With respect to argument 4, there once again are statements being made which have no factual support that these statements are in fact true, other than the affidavit which is not timely filed and not being considered. In general, as held by the examiner in the final rejection, Tayside teaches forming a spiral fin in a wall of a blood flow tubing for imparting spiral flow within the fluid, but does not teach the extent of the spiral being a distance equal to between 40-60% of the distance from the longitudinal axis to the internal side wall. Kuhlmann provides a teaching that at the time of Tayside, the size of the spiral for providing spiral flow is selected based upon speed of the flow where larger height h of the spiral can be chosen for slower flows and where the range of such size is within the claimed 40-60% of the distance between the longitudinal axis and the internal

wall, where such is clearly combining prior art elements according to known methods to yield a predictable result uses a known technique to improve a similar device, that of a spiral for imparting spiral flow in a tube or pipe, in the same way. There is no proof that the statements made herein are factual, and the reference to Kuhlmann does not limit itself for use with only specific types of fluids over other fluids, therefore this argument is not persuasive when not supported by factual evidence that such is true.

Appellant has stated that claims 17-27 depend on claim 16, and has offered no argument as to the particulars of claims 17-27 specifically, therefore the limitations of claim 16 are all that should be considered at this time.

In general, the examiner has set forth that the combination of the references is supported by the reference to Kuhlmann, and that there would be an expectation of success as also supported by Kuhlmann. All of the arguments presented by Appellant are directed solely to unsupported statements that have no factual basis provided and are directed to an affidavit that is not timely filed and is not being considered. There is no new rejection or argument provided herein.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.



For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/James F. Hook/

Primary Examiner, Art Unit 3754

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/Kevin P. Shaver/

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